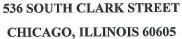


Date:

11/1/2013

### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## REGION 5 CHICAGO REGIONAL LABORATORY 536 SOUTH CLARK STREET





	Subject:	Review of Region 5 Data for Veolia, Sauget, IL.	
	From:	Colin Breslin, Chemist Region 5 Chicago Regional Laboratory	
	То:	RCRA, LCD, US EPA Region 5 77 West Jackson Boulevard Chicago, IL 60604	
	our curre does not	being transmitted under this cover memo successfully passed on the Quality Management Plan (QMP) and appropriate Standard perform data validation which is based on your data quality obtatory generating the data.	Operating Procedures (SOPs). Please be aware that CRL
	Results i	n this report represent only the samples analyzed.	
	Please ha	ave the U.S. EPA Project Manager/Officer call the CRL Samples.	e Coordinator at (312) 353-0375 for any comments or
	Attache	d are Results for: Veolia, Sauget,IL.	
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	Data M	anagement Coordinator and Date Received	Lama Fridaet I
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Page 1 of 4

Report Name: 1308010 FINAL Nov 01 13 1226



# Environmental Protection Agency Region 5 Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591



RCRA, LCD, US EPA Region 5 77 West Jackson Boulevard Chicago IL, 60604

Project: Veolia, Sauget, IL. Project Number: [none]

Project Manager: Todd Ramaly

Reported: Nov-01-13 12:26

### **Analysis Case Narrative**

#### **General Information**

Two water samples for the analysis of total mercury by cold vapor atomic absorption (CVAA) were received at the Chicago Regional Laboratory (CRL) on August 28, 2013. All samples were analyzed within the 28 day hold time. The designated analyst, Colin Breslin, can be reached at 312-886-2912.

### Sample Analysis and Results

The samples were prepared and analyzed according to CRL SOP AIG044B, Revision No: 1.0 (EPA 245.1) and an approved CRL Pen&Ink Change (Reference No: AIG044-PI01), which incorporates into CRL SOP AIG044B the requirements of the most currently approved version of reference method, EPA 245.1 Revision 3.0.

Sample 1308010-01 (Spike 01) required a dilution factor of 400,000 to fall within instrument calibration range. The dilution corrected result, reported in units of  $\mu g/L$  (ppb), was 2,220,000  $\mu g/L$  total mercury, which converted to units of mg/L (ppm) was equivalent to 2,220 mg/L total mercury.

Sample 1308010-02 (Spike 02) required a dilution factor of 4,000,000 to fall within instrument calibration range. The dilution corrected result, reported in units of  $\mu g/L$  (ppb), was 21,500,000  $\mu g/L$  total mercury, which converted to units of mg/L (ppm) was equivalent to 21,500 mg/L total mercury.

### **Quality Control**

All Quality Control (QC) audits were within CRL limits for the requested analytes or did not result in qualification of the data.

### Matrix Spike:

The matrix spike required dilution to fall within instrument calibration range. After dilution correction, the calculated recovery was outside of the acceptable QC limits of 70-130%. The sample results were reported without data flags because the matrix spike level was diluted to near the reporting limit level, where uncertainty is inherently greater. No significant impact was expected for the overall data set from this QC excursion.

CB 11/01/13



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RCRA, LCD, US EPA Region 5 77 West Jackson Boulevard Chicago IL, 60604 Project: Veolia, Sauget,IL.

Project Number: [none]

Project Manager: Todd Ramaly

Reported:

Nov-01-13 12:26

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Spike 01	1308010-01	Water	Aug-27-13 13:00	Aug-28-13 08:30
Spike 02	1308010-02	Water	Aug-27-13 13:10	Aug-28-13 08:30

### Mercury by Cold Vapor, EPA Method 245.1 (modified)

**US EPA Region 5 Chicago Regional Laboratory** 

Spike 01 (1308010-01) Water Sampled: Aug-27-13 13:00 Received: Aug-28-13 08:30

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared Analyzed	
Mercury	2220000			200000	ug/L	400000	B309031	Sep-05-13 Sep-06-13	

#### Spike 02 (1308010-02) Water Sampled: Aug-27-13 13:10 Received: Aug-28-13 08:30

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared Analyzed
Mercury	21500000	3000		2000000	ug/L	4000000	B309031	Sep-05-13 Sep-06-13

CB 11/01/13

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Report Name: 1308010 FINAL Nov 01 13 1226



Chicago IL, 60604

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RCRA, LCD, US EPA Region 5 77 West Jackson Boulevard

Project: Veolia, Sauget,IL.

Project Number: [none]

Project Manager: Todd Ramaly

Reported: Nov-01-13 12:26

**Notes and Definitions** 

U

Not Detected

NR

Not Reported

### Items for Project Manager Review

LabNumber	Analysis	Analyte	Exception			
			Default Report (not modified)			
			VERSION 6.12:2003			
B309031-MS1	Hg Total CVAA	Mercury	Exceeds upper control limit			
B309031-MS1	Hg Total CVAA	Mercury	Spike less than MDL			

### Sample, Log and Extraction Comments

1308010-01 Hg Total CVAA

pH = 0pH = 0

1308010-02 Hg Total CVAA

pH = 0pH = 0